

from the group consisting of:

- (a) a polynucleotide comprising a nucleotide sequence consisting of a coding sequence for the polypeptide of SEQ ID NO:130;
- (b) a polynucleotide comprising the nucleotide sequence of SEQ ID NO:129; and
- (c) a polynucleotide comprising a nucleotide sequence encoding the polypeptide of SEQ ID NO:130.

102. (New) An isolated polynucleotide encoding a non-endogenous, constitutively activated version of a human G protein-coupled receptor, wherein said polynucleotide is selected from the group consisting of:

- (a) a polynucleotide consisting essentially of a nucleotide sequence consisting of a coding sequence for the polypeptide of SEQ ID NO:130;
- (b) a polynucleotide consisting essentially of the nucleotide sequence of SEQ ID NO:129;
- (c) a polynucleotide consisting essentially of a nucleotide sequence encoding the polypeptide of SEQ ID NO:130.

103. (New) A vector comprising the polynucleotide of claim 101 or claim 102.

104. (New) The vector of claim 103, wherein said vector is an expression vector, and said polynucleotide is operably linked to a promoter.

105. (New) A recombinant host cell comprising the vector of claim 103.

106. (New) A recombinant host cell comprising the vector of claim 104.

107. (New) A process for making a recombinant host cell comprising the steps of:

- (a) transfected the expression vector of claim 104 into a suitable host cell; and

(b) culturing the host cell under conditions which allow expression of a non-endogenous, constitutively activated version of a human G protein-coupled receptor from the expression vector.

108. (New) A membrane of the recombinant host cell of claim 105 comprising said non-endogenous, constitutively activated version of said human G protein-coupled receptor.

109. (New) An isolated polynucleotide encoding a non-endogenous, constitutively activated version of a human G protein-coupled receptor, wherein said polynucleotide is selected from the group consisting of:

- (a) a polynucleotide comprising a nucleotide sequence consisting of a coding sequence for the polypeptide of SEQ ID NO:130 wherein the codon corresponding to lysine at amino acid position 297 has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine;
- (b) a polynucleotide comprising the nucleotide sequence of SEQ ID NO:129 wherein the codon at nucleotide positions 889-891 corresponding to lysine has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine; and
- (c) a polynucleotide comprising a nucleotide sequence encoding the polypeptide of SEQ ID NO:130 wherein the codon corresponding to lysine at amino acid position 297 has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine.

110. (New) An isolated polynucleotide encoding a non-endogenous, constitutively activated version of a G protein-coupled receptor, wherein said polynucleotide is selected from the group consisting of:

- (a) a polynucleotide consisting essentially of a nucleotide sequence consisting of a coding sequence for the polypeptide of SEQ ID NO:130 wherein the codon

corresponding to lysine at amino acid position 297 has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine; and

(b) a polynucleotide consisting essentially of the nucleotide sequence of SEQ ID NO:129 wherein the codon at nucleotide positions 889-891 corresponding to lysine has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine

(c) a polynucleotide consisting essentially of a nucleotide sequence encoding the polypeptide of SEQ ID NO:130 wherein the codon corresponding to lysine at amino acid position 297 has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine.

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111. (New) A vector comprising the polynucleotide of claim 109 or claim 110.

112. (New) The vector of claim 111, wherein said vector is an expression vector, and said polynucleotide is operably linked to a promoter.

113. (New) A recombinant host cell comprising the vector of claim 111.

114. (New) A recombinant host cell comprising the vector of claim 112.

115. (New) A process for making a recombinant host cell comprising the steps of:

(a) transfected the expression vector of claim 112 into a suitable host cell; and

(b) culturing the host cell under conditions which allow expression of a non-endogenous, constitutively activated version of a G protein-coupled receptor.

116. (New) A membrane of the recombinant host cell of claim 113 comprising said non-endogenous, constitutively activated version of said G protein-coupled receptor.

117. (New) An isolated polynucleotide encoding a G protein fusion construct of a non-endogenous, constitutively activated version of a G protein-coupled receptor, wherein said polynucleotide comprises the nucleotide sequence of SEQ ID NO:129.

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118. (New) An isolated polynucleotide encoding a G protein fusion construct of a non-endogenous, constitutively activated version of a G protein-coupled receptor, wherein said polynucleotide comprises a nucleotide sequence consisting of a coding sequence for the polypeptide of SEQ ID NO:130.

119. (New) An isolated polynucleotide encoding a G protein fusion construct of a non-endogenous, constitutively activated version of a G protein-coupled receptor, wherein said polynucleotide comprises a nucleotide sequence selected from the group consisting of:

- (a) a nucleotide sequence consisting of a coding sequence for the polypeptide of SEQ ID NO:130 wherein the codon corresponding to lysine at amino acid position 297 has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine; and
- (b) the nucleotide sequence of SEQ ID NO:129 wherein the codon at nucleotide positions 889-891 corresponding to lysine has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine
- (c) a nucleotide sequence encoding the polypeptide of SEQ ID NO:130 wherein the codon corresponding to lysine at amino acid position 297 has been left unchanged or has been substituted with a codon corresponding to an amino acid other than valine.

120. (New) A vector comprising the polynucleotide of any one of claims 117, 118 or 119.

121. (New) The vector of claim 120, wherein said vector is an expression vector, and said

polynucleotide is operably linked to a promoter.

122. (New) A recombinant host cell comprising the vector of claim 120.

123. (New) A recombinant host cell comprising the vector of claim 121.

124. (New) A process for making a recombinant host cell comprising the steps of:

- (a) transfected the expression vector of claim 121 into a suitable host cell; and
- (b) culturing the host cell under conditions which allow expression of a G protein fusion construct of a non-endogenous, constitutively activated version of a G protein-coupled receptor, from the expression vector.

125. (New) A membrane of the recombinant host cell of claim 122 comprising said G protein fusion construct.

126. (New) An isolated polynucleotide of any of claims 117, 118 or 119 wherein said G protein of said G protein fusion construct is $Gs\alpha$.

127. (New) A vector of claim 120 wherein said G protein of said G protein fusion construct is $Gs\alpha$.

128. (New) A vector of claim 121 wherein said G protein of said G protein fusion construct is $Gs\alpha$.

129. (New) A recombinant host cell of claim 122 wherein said G protein of said G protein fusion construct is $Gs\alpha$.

130. (New) A recombinant host cell of claim 123 wherein said G protein of said G protein

fusion construct is G_s α .

131. (New) The process of claim 124 wherein said G protein of said G protein fusion construct is G_s α .

132. (New) The membrane of claim 125 wherein said G protein of said G protein fusion construct is G_s α --

REMARKS

After entry of the present amendment, claims 101-132 will be pending in this application.

The claims have been amended to comport with the restriction requirement, and for purposes of clarity. New claims 101-132 find support in claims 93, 95 and 96 as filed, in the present specification at pages 30-31, 35, 52-56, in the sequence listing at pages 71-74, and in priority application 60/123,945 (which is incorporated by reference into the present specification - see the present specification at page 1, lines 11-12 and page 2, lines 18-19) at, for example, pages 7, 16-17, 19-20, pages 22-25, and in Figure 1.¹ No new matter has been added.

The Office Action has required restriction among fifty-six groups alleged to be patentably distinct. In response, Applicants elect herein the subject matter of Group XXVII, claims 93, 95 and 96, with traverse. While the present amendment has rendered the restriction moot, new claims 101-132 are believed to be drawn to subject matter within the present election. For example, new claim 101 recites:

101. (New) An isolated polynucleotide encoding a non-endogenous, constitutively activated

¹ Applicants provided herewith a copy of the 60/123,945 provisional application for the Examiner's convenience. Should the Examiner deem it necessary, Applicants will gladly amend the present specification to incorporate the relevant portions of the 60/123,945 application.